

## 24 August 2010 R/V Ferrel Status Report, Cruise 8 – Day 1

Compiled by Zach Weber, Chief Scientist

### 1.) Site Conditions, Daily Activities and Sampling Locations

The Ferrel spent the day approximately 127 miles South West of the MC-252 wellhead conducting casts along transect 10 as directed in the Mission Guidance. The Ferrel arrived to its first sample location at 0800 123 miles South West of the wellhead and sampled three locations: Transect 10 Station 16, Transect 10 Station 17, and Transect 10 Station 18. Average weather conditions: Air Temperature 87 degrees Fahrenheit, seas 1ft, current .5kt out of the West, calm winds, and cloud coverage remained around 90% with scattered rain storms throughout the day. The three CTD casts were undertaken to try to locate and sample remnants of the dispersed oil plume that may be around the 1150m depth but no evidence showing impact deeper than 1400m as indicated by a dip in dissolved oxygen levels and a rise in fluorescence in the water column. The cast (T10 S16) was conducted in water exceeding the total recommended CTD cast depth. The cast showed no visible peak in fluorescence, but did show slight depressions in dissolved oxygen at two separate depths. The cast (T10 S17) was conducted in water exceeding the total recommended CTD cast depth. The cast showed no visible peak in fluorescence, but did show slight depressions in dissolved oxygen at three separate depths. The cast (T10 S18) was conducted in water exceeding the total recommended CTD cast depth. The cast showed no visible peak in fluorescence, but did show slight depressions in dissolved oxygen at four separate depths. Field analyses included dissolved oxygen, fluorescence, temperature, pH and salinity. Water samples were also collected for further chemical and microbiological analyses at four depths on the first cast and three depths at the second and third cast (at 850m, 975m, 1075m and 1200m on cast 1, 950m, 1060m, and 1200m on cast 2, and 950m, 1075m, and 1200m on cast 3). In addition, surface water samples were collected for microbiological analyses at all three locations.

The results of the CTD casts were:

Station	Position from wellhead	Fluorescence signal	Signal depth	Comment
BP-TN15-SS01 (T10 S16)	123 miles SW	None	N/A	DO decline with two depressions of 0.2 mg/l at 975m and 1040m. Total CTD cast depth 1500m.
BP-TN15-SS02 (T10 S17)	127 miles SW	None	N/A	DO decline with three depressions of 0.1 mg/l at 1020m, 1060m, and <0.1 mg/l at 1036m. Total CTD cast depth 1500m
BP-TN15-SS03 (T10 S18)	131 miles SW	None	N/A	DO decline with four depressions of 0.1 mg/l at 1020m, 0.2 mg/l at 1075m, and <0.1 mg/l at 1052m and 1105m. Total CTD cast depth 1748m.

### 2.) Air Quality

Not required.

### 3.) Science Crew

Name	First Name	Affiliation	Role
Weber	Zach	CTEH	Chief Scientist
Weiland	Corey	Entrix	Water Sampler
Pelling	Ray	Entrix	Water Sampler
Smith	Craig	C&C	Party Chief Team
Burke	Emily	C&C	Oceanography Team
McLeod	Alex	C&C	Oceanography Team
Tidwell	Hearn	SHAW	Microbiologist
Reid	Francine	LBNL	Microbiologist
Summers	Kaitlyn	NOAA	Data Manager

